

Remarks/Arguments

Claims 1 - 21 remain in the case.

In the outstanding Office Action, the Examiner held that Applicant's response filed on July 29, 2005 was not responsive to the Office Action of April 25, 2005 because there were no "arguments pointing out the specific distinctions believed to render newly presented claim 21 patentable over any applied references." With respect, it is submitted that in the previous amendment, it was stated that "we propose adding a new independent method claim 21, which combines the features of the original Claim 1 and Claim 12, and claims objectives of the newly proposed signaling functions at the Ethernet level." Thus the applicable arguments for the patentability of Claims 1 and of Claim 12 would be available for Claim 21.

Nevertheless, it is pointed out further as follows:

I. The Applicant wishes to complement the response of July 19 with the following text portion which was skipped due to a technical oversight (this text portion should have served as a bridging paragraph between page 13 and page 14 and was missing in the response):

"...and Naveh (as well as the other cited references) does not describe/suggest any solution comprising creating a separate signaling packet flow combinable with an informational packet flow.

Claim 11 is therefore patentable as well.

In view of the cited references and the proposed arguments, the Applicant does not see a need in restricting the claims presently on file.

3. New Claim 21

The Applicant proposes adding a new independent method claim 21, claiming objectives of the signaling functions at the Ethernet level, which were proposed in the originally filed patent application. The new Claim 21 combines the features of the original Claim 1 and the features disclosed in the original description (pages 16-18) and partially claimed in the original Claim 12.

21.(new) A method of providing a signaling channel for performing one or more signaling functions at the level of Ethernet wherein telecommunication is organized by information...”

The remaining text of the new Claim 21 and the continuation of the arguments is presented in the response filed on July 19, 2005.

II. In order to present arguments pointing out the specific distinctions rendering Claim 21 patentable over any applied references, the Applicant wishes to point out that the new Claim 21 combines the features of Claim 1 and those disclosed in the specification (pages 16-18) and partially claimed in the original Claim 12.

As has been mentioned with reference to Claim 1, neither of the cited references alone, nor any of their combinations teaches providing a service/signaling channel at the Ethernet level, in the form of service packets compatible with the Ethernet informational packets and serving for carrying indication of signaling functions to be performed at the level of Ethernet.

Indeed, *Kalman* mentions signaling at the level of SONET (SDH) in the optical ring networks (see the abstract and the background of *Kalman*), the signaling is utilized for obtaining information about span cuts and determining a protection route in the ring network in case of a failure). *Kalman* does not say anything about signaling channel/ service flow /signaling packet flow at the Ethernet layer. The only hint on having any Ethernet equipment at all in the network can be found in *Kalman* in col. 12 (lines 5-15). *Kalman* mentions that a processor having an Ethernet port may modify information in the header of packets not destined for the node. However, even if we assume that the “modification” is performed at the Ethernet layer, no additional (service) packet flow is created; the changes affect the informational packets themselves. The modification, if at all performed at the Ethernet level, relates to a known standard functionality at the Ethernet level, according to which the informational packets are changed depending on the errors in the Ethernet traffic; the function of changing the header (such as “double tagging”) also allows forwarding, routing (switching, addressing) the packet to different destinations according to indications in its header. As can be seen in Fig. 7 of *Kalman*, the packets from the packet processor 48 are forwarded to Switch Fabric 50.

Contrary to that, the present invention proposes forming additional service packets to be transmitted together with the informational packets (in a combined packet flow) at the Ethernet level - and not modifying informational packets. The additional packet flow performs an additional, different functionality, different from the switching/routing function mentioned in the *Kalman* reference.

To be more specific, this signaling/service functionality can be called “operating and maintenance function “ at the level of Ethernet, and it is not related to any routing or switching. Examples of the signaling functions claimed in the independent Claim 1 are presented in the specification and in the original Claim 12.

As has been mentioned before with respect to Claim 12, the Examiner considers that *Kalman*, in col.3 lines 10-17, describes a Tandem Connection function. However, the cited text portion describes broadcasting, by a node, of a high priority message about a fault in a link, in case such a fault is detected by the node. This cited text has no relation to any signaling function on the Ethernet level, and does not describe any additional signaling packet flow which would/could be combined with the informational flow.

Fields describes multiplexing informational flows at the Ethernet level. However, *Fields* neither describes nor suggests providing any signaling information or service/signaling flow to be further combined with any of the mentioned informational flows.

Naveh describes Quality of Service management of network data flows. However, *Naveh* teaches performing the QOS management only at TCP/IP networks corresponding to the Internet Protocol (IP) layer.

Naveh uses the informational IP packet for indicating therein (in the field TOS) the type of Quality of Service (QOS) which should be applied to the packet flow to which the packet belongs. Note, that Naveh does not create an additional signaling packet flow;

The Examiner considers that the motivation given in *Naveh* (col 4, lines 20-25), i.e.

invoking QOS functions, automatically leads to the idea to create a signaling packet flow at the Ethernet layer. The Applicant disagrees, since QOS functions are not the signaling functions, QOS is not the purpose of the present invention, IP protocol is a protocol different from the Ethernet protocol, and Naveh (as well as the other cited references) does not mention or hint to any solution comprising creating a separate signaling packet flow combinable with an informational packet flow.

Neither of the cited references describes/suggests the specific service functions at the Ethernet layer, which are claimed in Claim 21.

The new claim 21 proposed below is therefore new and non-obvious over the cited references of Kalman, Fields and Naveh.

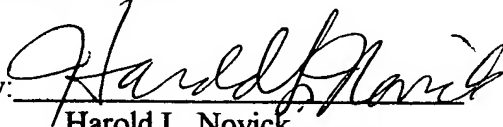
CONCLUSION

In light of the foregoing, Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicant petitions for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted

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